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June 6, 2013 Reference No. 027545-00

Mr. Gary G. Miller
Remedial Project Manager
United States Environmental Protection Agency 6SF-RA
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202

Dear Mr. Miller:

Re: Final Feasibility Study Report Revised Pages
Star Lake Canal Superfund Site
Jefferson County, Texas
CERCLA Docket No. 06-02-06

Conestoga-Rovers & Associates (CRA) and Cardno ENTRIX, on behalf of Chevron Environmental Management Company (CEMC) and Huntsman Petrochemical LLC (Huntsman), submit herein to the U.S. Environmental Protection Agency (EPA) the revised pages for the Final Feasibility Study (FS) Report for the Star Lake Canal Superfund Site located in Jefferson County, Texas (Site). This correspondence includes only the revised report text page and tables. The attached revised pages should replace existing pages in the Final FS Report dated June 4, 2012. The Final FS Report includes the following revisions:

**REPORT TEXT**

Revised report text includes page 199.

**TABLES**

Tables 6-7 and 7-7 were revised and are attached.

A complete electronic copy of the Final FS Report with the incorporated revisions will be submitted via email.

Should you have any questions regarding this submittal, please contact CRA or Mr. Gary Jacobson of CEMC at (713) 432-2636.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

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of a 6-inch layer of clay, to inhibit infiltration, overlaid with a 6-inch layer of top soil to allow for vegetative stabilization. The MNR alternative lowers the risk of interaction between benthic invertebrates and the sediment very gradually. Overall protection of the environment depends upon the rate of naturally driven degradation and dispersion processes. Natural processes will be monitored by scheduled sampling events over the 10 year time period. Table 6-7 displays the cost summary to implement this alternative. The costs are separated into three categories: Base Implementation, Remediation and Disposal, and Present-Worth O&M Costs. Base Implementation Costs are defined as, but not limited to, equipment and personnel mobilization to and from the Site, pre-remediation Site work, facilities, and Site characterization sampling and analysis. Remediation and Disposal Costs are defined as, but not limited to, equipment (excavator, loader, trucks, etc.), operators (includes lodging, transportation, per diem and wages), materials (cap, backfill, pipe, etc.), and disposal costs of the off-Site disposal facility. All material, equipment, and disposal price calculations were based from verbal or written quotes obtained from licensed, regional vendors approved by the EPA and PRPs. Present Worth O&M Costs are defined as, but are not limited to, engineered monitoring equipment (including installation), annual maintenance, and monitoring. Maintenance and monitoring events are scheduled monthly for the first two years, quarterly for years three through five, and semiannually for the remainder of the 10-year time frame. Semiannual site inspections will be conducted every year in addition to the scheduled sampling events. Scheduled sampling events (years one, two, four, eight, and ten) will include extensive sediment and soil sample collection. Samples will be collected from the same vicinity to verify and validate a true representation of remedial progress over time. Monitoring events include sample collection and analysis to determine status and progress of remedial action implementation and a thorough AOI site inspection. All sample analysis costs were calculated from quotes obtained from a qualified laboratory.

### 6.8.4 ALTERNATIVE 2C – MONITORED NATURAL RECOVERY AND 12-INCH REMOVAL AND DISPOSAL AND CONTAINMENT: 12-INCH ARMORED CAP

This alternative utilizes MNR for the Molasses Bayou Waterway polygons that correspond to sample numbers MB-51, MB-56, MB-58, and MB-59; and 12-inch removal/disposal and containment with a 12-inch armored cap for the polygons that correspond to sample numbers MB-26 MB-62, and MB-63. Material will be excavated with hydraulic dredge equipment, staged in an area to be de-watered (by filter press or Geo-Tubes) and transported to a licensed off-Site disposal facility. A 12-inch armored backfill (layer of cobbles, pebbles or other large material and prohibits disturbance by its

TABLE 6-7

ALTERNATIVE COST ESTIMATE FOR MOLASSES BAYOU WETLAND AOI
STAR LAKE CANAL SUPERFUND SITE
JEFFERSON COUNTY, TEXAS

| *Item* | *Alternative Description* | *Base Implementation Cost*[1] | *Remediation and Disposal Cost*[2] | *Present Worth Operation & Maintenance Cost*[3] | *Estimated Total Cost* |
|---|---|---|---|---|---|
| ***Alternative 1- Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63*** | | | | | |
| 1 | No action | $0 | $0 | $0 | $0 |
| ***Alternative 2 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63*** | | | | | |
| 2a | Monitored Natural Recovery | $360,000 | $954,000 | $853,000 | $2,167,000 |
| 2b | Monitored Natural Recovery and Containment: 12-inch Composite Cap | $540,000 | $3,213,000 | $1,127,000 | $4,880,000 |
| 2c | Monitored Natural Recovery and 12-inch Removal/Disposal and Containment: 12-inch Armored Cap | $2,040,000 | $12,764,000 | $1,127,000 | $15,931,000 |
| 2d | Monitored Natural Recovery and 12-inch Removal/Disposal | $2,040,000 | $10,917,000 | $1,127,000 | $14,084,000 |
| ***Alternative 3 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63*** | | | | | |
| 3 | Containment without excavation: 12-inch Composite Cap | $540,000 | $2,839,000 | $274,000 | $3,653,000 |
| ***Alternative 4 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63*** | | | | | |
| 4 | Partial 12-inch Removal/Disposal and Partial Containment: 12-inch Armored Cap | $2,040,000 | $29,680,000 | $274,000 | $31,994,000 |
| ***Alternative 5 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63*** | | | | | |
| 5 | Partial 12-inch Removal/Disposal | $2,040,000 | $24,893,000 | $274,000 | $27,207,000 |

Notes: 1. Base Implementation Cost includes mobilization/demobilization costs, site preparations and site characterization analyses costs
2. Treatment and Disposal Costs include: excavation, dredging, capping, backfill, other materials, and disposal costs at an offsite disposal facility
3. Present Worth O&M Cost includes: engineered monitoring equipment including installation, annual maintenance and monitoring. All costs are accrued for a 10-year term

TABLE 7-7

COMPARATIVE ANALYSIS OF REMEDIAL ALTERNATIVES FOR MOLASSES BAYOU WETLAND AOI
STAR LAKE CANAL SUPERFUND SITE
JEFFERSON COUNTY, TEXAS

| Item | Alternative Description | Threshold Criteria | | Balancing Criteria | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Overall Protection of the Environment | Compliance with ARARs | Long-Term Effectiveness | Reduction of Toxicity, Mobility, and Volume | Short-Term Effectiveness | Implementability | Cost |
| *Alternative 1- Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63* | | | | | | | | |
| 1 | No Action | N | N | 1 | 1 | 1 | 5 | $0 |
| *Alternative 2 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63* | | | | | | | | |
| 2a | Monitored Natural Recovery | N | S | 3 | 3 | 3 | 5 | $2,165,340 |
| 2b | Monitored Natural Recovery and Containment: 12-inch Composite Cap | S | S | 4 | 4 | 3 | 4 | $4,880,000 |
| 2c | Monitored Natural Recovery and 12-inch Removal/Disposal and Containment: 12-inch Armored Cap | S | S | 4 | 4 | 3 | 3 | $15,930,240 |
| 2d | Monitored Natural Recovery and 12-inch Removal/Disposal | S | S | 4 | 4 | 3 | 4 | $14,083,240 |
| *Alternative 3 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63* | | | | | | | | |
| 3 | Containment - without excavation: 12-inch composite cap | S | S | 4 | 3 | 4 | 2 | $3,653,000 |
| *Alternative 4 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63* | | | | | | | | |
| 4 | Partial 12-inch Removal/Disposal and Partial Containment: 12-inch Armored Cap | N | S | 5 | 5 | 4 | 1 | $31,994,000 |
| *Alternative 4 - Polygons that correspond to sample numbers: MB-26, MB-51, MB-56, MB-58, MB-59, MB-62, and MB-63* | | | | | | | | |
| 5 | Partial 12-inch Removal/Disposal | N | S | 5 | 5 | 4 | 2 | $27,207,000 |

| *Criteria and Numerical Scoring for Evaluation of Remedial Alternatives* |
|---|
| **Threshold Criteria: Minimum Requirements** |
| N-Does not satisfy criterion<br>S-Satisfies criterion |
| **Balancing Criteria: Multiple Criteria Simultaneously Considered** |
| 1 -Low<br>2-Low to Moderate<br>3-Moderate<br>4-Moderate to High<br>5-High |